

ABSTRACT OF THE DISCLOSURE

Obfuscating an application program comprises reading a first application program, determining an application program instruction location permutation that transforms the first application program into an obfuscated application program having at least one application program instruction stored at a memory location that is based at least in part on a permutation of the memory location where the corresponding application program instruction is stored in the first application program, applying the application program instruction location permutation to the first application program to create an obfuscated application program, and sending the obfuscated application program. Executing an obfuscated application program comprises receiving an application program, determining an application program instruction location permutation to apply to a current instruction counter value, receiving, applying the application program instruction location permutation to the current instruction counter value to obtain a reference to an application program instruction to execute, and executing the application program instruction to execute.